

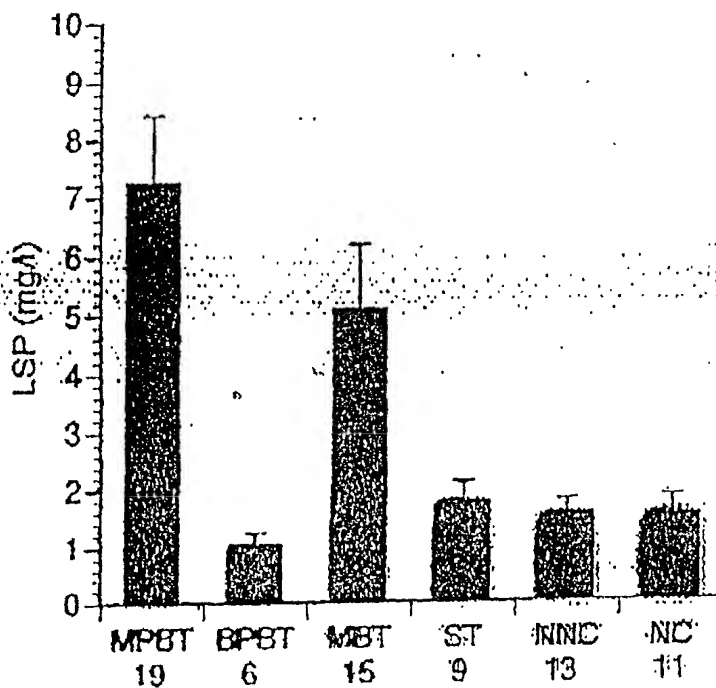
**METHOD FOR DETERMINING LIPID ASSOCIATED
SIALOPROTEIN IN BODY FLUIDS.**

ABSTRACT

The amount of lipid associated sialoprotein (LSP) in body fluids such as cerebrospinal fluid, peritoneal fluid, pleural fluid, bronchial washings, saliva and sputum samples, may be determined by a method which may be automated, involving the following steps to be performed on the sample: adding a mixture of a chlorinated lower alkyl alcohol; centrifuging to yield a substantially clear upper phase; recovering the upper phase and adding to it a protein precipitating agent; mixing the resulting admixture; recovering the resulting precipitate; washing the precipitate with saline solution; centrifuging to recover the precipitate; dissolving the precipitate in water; mixing; adding to the resulting mixture an hydrolysis agent; heating; and determining the amount of lipid associated sialoprotein present by determining the optical density of the sample.

FIG. 1

LSP in the CSF of patients with
and without brain tumors



MPBT : Malignant primary brain tumors

BPBT: Benign primary brain tumors

MBT: Metastatic brain tumors

ST: Systemic tumors without brain metastasis

NNC: Nonnormal neurologic controls

NC: Neurologic controls

FIG. 2A



FIG. 2B

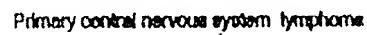


FIG. 2C

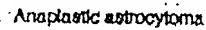


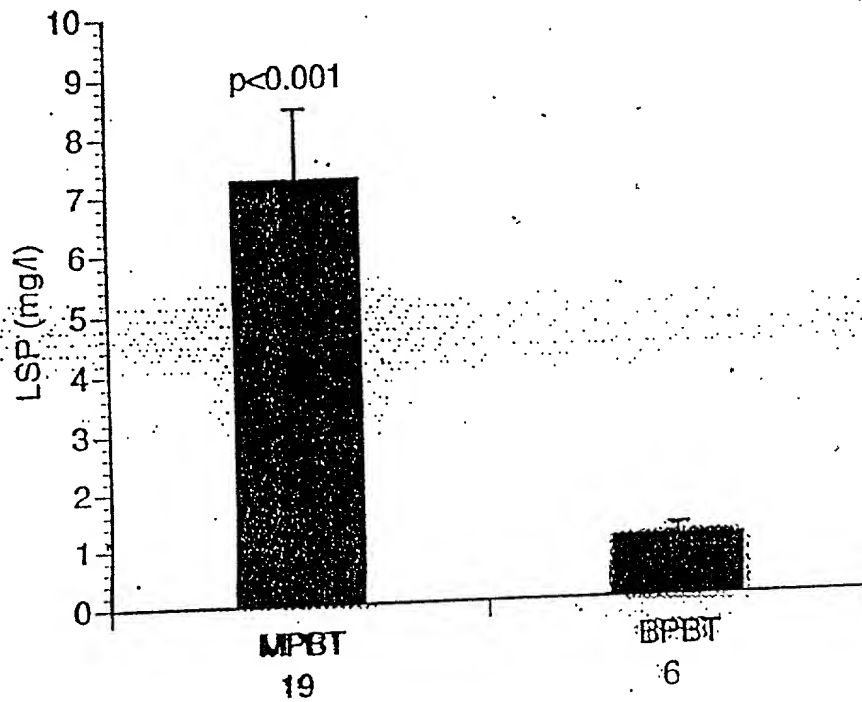
FIG. 2D



(+): positive CSF cytology
(-): negative CSF cytology

FIG. 3

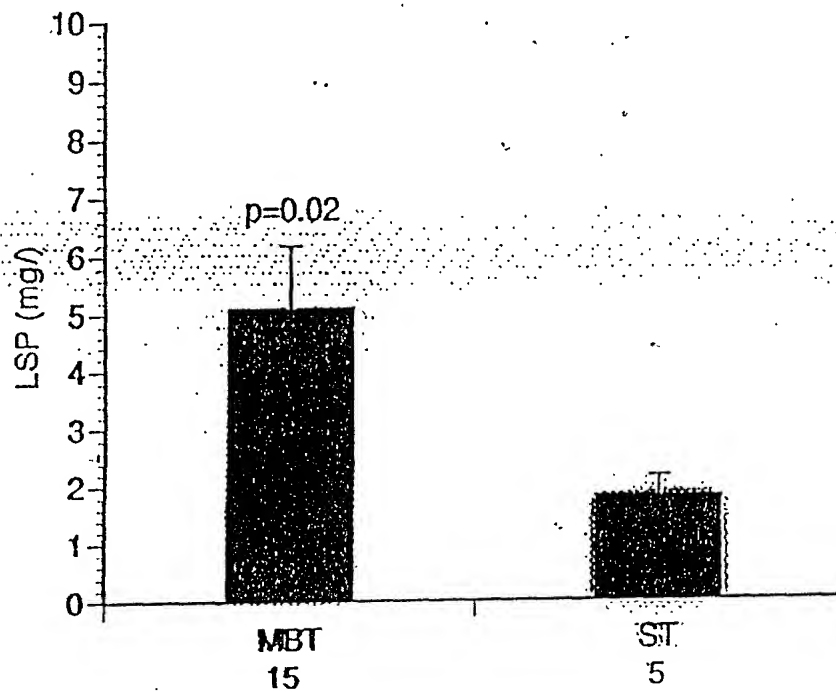
LSP in the CSF of patients with malignant
and benign primary brain tumors



MPBT: Malignant primary brain tumors
BPBT: Benign primary brain tumors

FIG. 4

LSP in the CSF of patients with systemic tumors with and without brain metastasis



MBT: Metastatic brain tumors

ST: Systemic tumors without brain metastasis

FIG. 5

LSP in the CSF of patients with HIV and
toxoplasmosis and patients with lymphoma

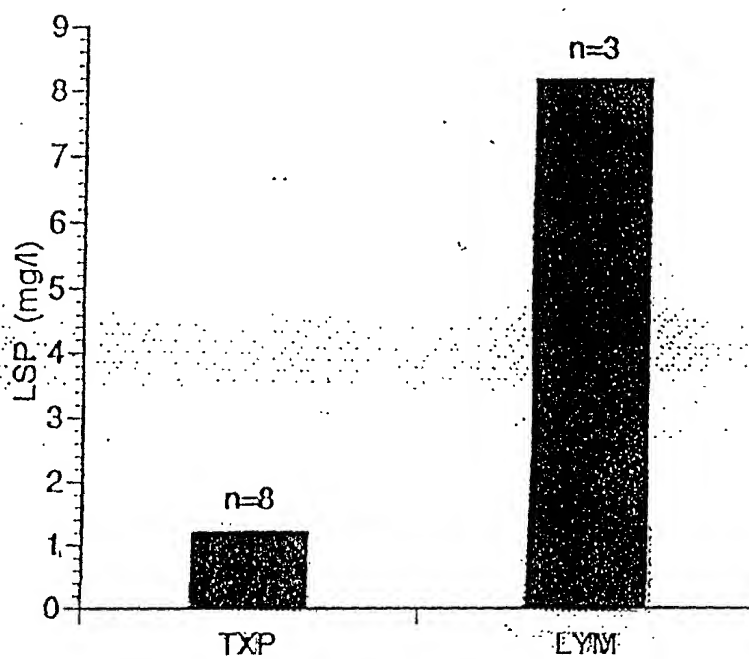
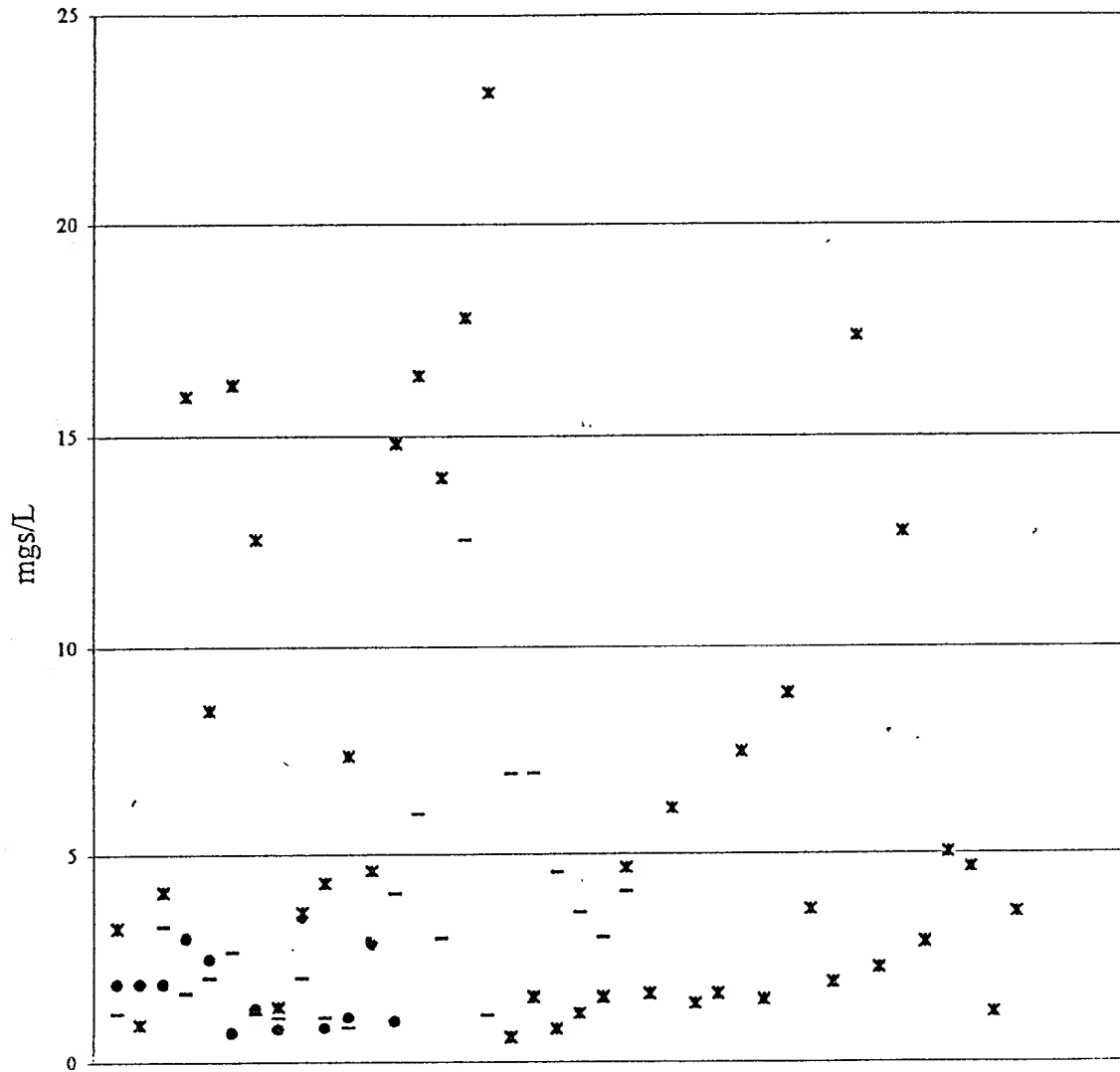


FIG. 6

LSP



- Control Samples Dizziness, Headaches, Strokes, Comatose, Other
- Patient Samples: Lyme Disease, Alzheimer's, Meningitis, Other (not Cancer)
- x Patient Samples: Malignancies in Different Stages